# Experimental Psychology

Psych 250 sec 03 – Spring 2024
Thurs (HW 117) & Mondy (HN 614) - 8:30 am to 11:20 am

*Instructor:* Evan Owens, Phd *Contact:* eowens@gradcenter..cuny.edu

*Office hours:* on Zoom
If this time does not work for you, let me know if you want to meet and we will figure out a time that works for both of us.

Teaching Assistant: *TBA*

**Course Description:**
This course is designed to be an introduction to the science of experimental psychology. We will cover a broad range of topics including the ethical considerations of studying human and non-human animals, methodologies used by researchers, how to formulate questions and generate hypotheses, writing scientific papers, and perhaps most importantly, how to be a better consumer of information. By the end of the semester you will not only be a better scientist, you will have learned to be more critical of "pop psychology" by understanding the research process.

**Prerequisites:**
- Declared psychology major
- Engl 120 with a minimum grade of C
- One year of acceptable lab science sequence with a passing grade
- Psych 248 with a minimum grade of C.

**Textbook** *(Mandatory):*
- *Research Methods, Design, and Analysis, 13th edition by Larry B. Christensen R Burke Johnson and Lisa A. Turner*
- Publication Manual of the American Psychological Association (APA), 7th Edition

**Useful Websites:**
- Purdue Online Writing Lab (Purdue OWL): https://owl.english.purdue.edu/owl/
- Collaborative Institutional Training Initiative: https://www.citiprogram.org

**Learning Outcomes:**

Students are expected to show competence in the following:

*A. Research Design*
1. Origin of research hypotheses.
2. Dependent and independent variables, determination of relevant variables, controlled and uncontrolled variables, general and procedural (operational) definitions of variables, internal and external validity, reliability.
3. Observational, correlational and experimental research.

4. Within and between subjects designs, order effects (counterbalancing), matching by pre-test, random selection, factorial design, single and matched samples, single subject and group data.
5. Organization, summarization and presentation of findings.
6. Calculation and interpretation of descriptive and inferential statistics.

*B. Ethics*

1. Informed consent, confidentiality, participant-experimenter interaction, and debriefing.
2. Completion of the CUNY computer based training (CBT) now called CITI Training. Note: Classroom exercises cannot be conducted prior to CBT.

*C. Information Literacy*

1. Information retrieval through library databases (e.g., PsycInfo, PubMed).
2. Use of abstracts, research journals.
3. Evaluation of sources.

*D. Techniques*

1. Data collection and analysis.
2. Use of computers and other experimental materials/apparatus and equipment for data collection.
3. Use computer programs such as Excel, JASP, and PowerPoint.

*E. Communication of Research Results*

1. Students in all sections must complete a minimum of four full APA research reports based on data collected for the course. There may be additional assignments.
2. The final paper should be an original study designed by the student.
3. The results of this experiment are to be presented in class preferably in the form of a PowerPoint presentation.

**What I expect of myself**

- Present up-to-date, unbiased information in an educational and interesting way
- Maintain respect and understanding for each individual student and their needs
- Provide the tools necessary to answer your questions

**What I expect of students**

- Treat fellow students (and the instructor) with respect and courtesy
- Realize that how well you do in class is directly related to the effort you put in
- Come to class with an attitude-free, open mind and a willingness to learn!

**Grading**

The following grading rubric will be used to determine your course grade:

*Final Grade Scale:* *Grading Breakdown:*

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| **A+** | 97.5-100 |
| **A** | 92.5-97.4 |
| **A-** | 90-92.4 |
| **B+** | 87.5-89.9 |
| **B** | 82.5-87.4 |

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|---|---|
| **B-** | 80-82.4 |
| **C+** | 77.5-79.9 |
| **C** | 70-77.4 |
| **D** | 60-69.9 |
| **F** | 0-59.9 |

**Exams** (30%)
There will be 4 exams, each worth 8% of your grade. Exams are multiple choice. Exams will be based mainly on lecture materials and assigned work. Each exam will be 60 minutes. Makeups will be given only with documented excuses. Your lowest exam score WILL NOT count towards your final grade.

**Papers** (35%)
Experimental Psychology requires that students write four (4) scientific papers that are in a form suitable for submission to a scholarly journal. These papers are based on original research that we will conduct in class, however, you will spend a great deal of time outside of class researching and writing your papers as well. I encourage people to work together to share good sources, etc., however, once it comes to writing your papers, you cannot collaborate. The first paper will be worth only 10% of your grade – this is to give you time to master the skill of writing, without getting low grades right from the start. The subsequent papers are worth 15% of your grade. Each paper must be submitted before you can submit the next. And all papers must be completed or you will not pass the class. Each day that a paper is late I will deduct 5 points from the grade.

If you would like me (or the TA) to look at drafts of papers prior to the due date, please give ample time (at least a few days) to ensure we will have time to read and respond.

**Quizzes** (15%)
You will complete quizzes based on chapters we cover in class. Quizzes will consist of 10 multiple choice questions.

**Exercises/ Lab Activities** (15%)
You will have various in-class and take-home assignments based on the course content. These will be submitted through Blackboard. They cannot be submitted late unless previously discussed with me.

**Participation** (5%)
Be present and involved in course activity.

# "Tentative" Course Schedule

Note: subject to change with advanced notice

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| **January** | | |
| Thursday 25th | Introduction + Chapter 1 – Scientific Method + Brief intro to Papers | |
| Monday 28th | Ch. 13 - Survey Research Intro, Discuss Survey Paper<br>Discuss Paper #1 | Complete CITI training by end of week |
| **February** | | |
| Thursday 1st | Ch. 13 - Survey Research + Library Meeting | Ch 13 quiz due Sunday |

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| Monday 5th | Chapter 2 + Survey Data Acquisition<br>LAB - Observational Project Introduction + Data Acquisition | |
| Thursday 8th | Chapter 2 - Research Approaches and Methods + APA Style | P1 Data collection Due by end of Week<br>Chapter 2 Quiz due Sunday |
| Monday 12th | NO CLASS | |
| Thursday 15th | Chapter 4 + LAB - JASP analysis of data Survey Paper | P1 Data analysis due by end of week |
| Monday 19th | NO CLASS | |
| Thursday 22nd | *Class follows monday schedule*<br>Chapter 4 - Ethics in Research + Lab | P1 Reference Section due end of week<br>Chapter 4 Quiz due Sunday |
| Monday 26th | EXAM 1 + Chapter 3 | |
| Thursday 29th | Chapter 3 + Paper 1 Results & Discussion | **Paper #1 Due end of week**<br>Quiz 3 due Sunday |
| **March** | | |
| Monday 4th | Chapter 10 - Observational Studies (Reading material on Bb) + Observational Paper Introduction | |
| Thursday 7th | Chapter 10 + Observation Data Collection (TBD) | Paper #2 Data due by the end of the week<br>Observational Studies Quiz due Sunday |
| Monday 11th | Chapter 6 – Between Subjects Design (Reading material on Bb) + Observation Paper Data Analysis | |
| Thursday 14th | Chapter 6 – Between Subjects Design (Reading material on Bb) + Observation Paper Intro and Methods | Paper #2 Data analysis due by the end of the week<br>Between Quiz due Sunday |
| Monday 18th | Chapter 7 – Within Subjects Design (Reading material on Bb) + Observation Paper Results, Discussion | |
| Thursday 21st | Chapter 7 – Within Subjects Design (Reading material on Bb) + Observation Paper Results, Discussion + Discuss Paper #3 | Paper 2 References due by the end of the week<br>Within Subj Quiz due Sunday |
| Monday 25th | EXAM 2 + Chapter 6 + Discuss Paper #3 | |
| Thursday 28th | Chapter 6 - Introduction to Experimentation + Paper 3 Intro | **Paper #2 Due end of week**<br>Chapter 9 Quiz due Sunday |
| **April** | | |
| Monday 1st | Chapter 9 + Paper #3 Data Acquisition | |
| Thursday 4th | Chapter 9 – + Paper 3 Methods | Ch 9 Quiz due Sunday<br>Paper # 3 Data due by the end of the week |
| Monday 8th | Chapter 15 + Paper 3 Data Analysis | |
| Thursday 11th | Chapter 15 + Paper 3 Results and Discussion | Ch 15 Quiz<br>Paper 3 Data Analysis due by end of week |
| Monday 15th | Chapters 16 + Stats & JASP Exercise + Introduce Paper 4 | |
| Thursday 18th | EXAM 3 + Chapters 16 - Inferential and Descriptive Stats + Paper 4 Data Acquisition | Ch 16 Quiz<br>Paper # 4 Data due by the end of the week |
| Monday 22nd | **No Class Spring Break 4/22 - 4/30** | |

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| Thursday 25th | **No Class Spring Break 4/22 - 4/30** | |
| Monday 29th | **No Class Spring Break 4/22 - 4/30** | |
| **May** | | |
| Thursday 2nd | Chapter 9 – Factorial Design (Reading material on Bb) + Paper 4 data analysis | **Paper #3 Due end of week** |
| Monday 6th | + Chapter 9 | Factorial Quiz |
| Thursday 9th | Chapter TBD + Paper 4 Data Analysis + Results and Discussion | |
| Monday 13th | Chapter TBD - Research Validity + Discussion | Paper 4 Results Due |
| Monday 20th | Final Exam TBA | |
| Sunday 19th | **Final Papers Due at 12 Noon** | **Paper #4 Due** |

**Blackboard/Email:**
Class slides, readings, and assignments will be posted on Blackboard. Please make sure that you check your Hunter email regularly. Class announcements will be delivered to that account.

**Academic Integrity:**
Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

**Sexual Misconduct**
In compliance with the CUNY Policy on Sexual Misconduct, Hunter College reaffirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-based harassment retaliation against students, employees, or visitors, as well as certain intimate relationships. Students who have experienced any form of sexual violence on or off campus (including CUNY-sponsored trips and events) are entitled to the rights outlined in the Bill of Rights for Hunter College. a. Sexual Violence: Students are strongly encouraged to immediately report the incident by calling 911, contacting NYPD Special Victims Division Hotline (646-610-7272) or their local police precinct, or contacting the College's Public Safety Office (212-772-4444). b. All Other Forms of Sexual Misconduct: Students are also encouraged to contact the College's Title IX Campus Coordinator, Dean John Rose (jtrose@hunter.cuny.edu or 212-650-3262) or Colleen Barry (colleen.barry@hunter.cuny.edu or 212-772-4534) and seek complimentary services through the Counseling and Wellness Services Office, Hunter East 1123. CUNY Policy on Sexual Misconduct http://www.hunter.cuny.edu/diversityandcompliance/repository/files/cuny-policy-on-sexual-misconduct.pdf

**AccessAbility**
In compliance with the American Disability Act of 1990 (ADA) and with section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (emotional, medical, physical and/or learning) consult the Office of AccessAbility located in Room E1124 to secure necessary academic accommodations. For further information and assistance please call the Office of AccessAbility at 212-772- 4857 (TTY; 212-650- 3230).